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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/060,394	02/01/2002	Il Yu	1567.1029	9607

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EXAMINER	
KOSLOW, CAROL M	
ART UNIT	PAPER NUMBER

1755

DATE MAILED: 05/29/2003

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Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.	YU ET AL.	
10/060,394		
Examiner	Art Unit	
C. Melissa Koslow	1755	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

1) Responsive to communication(s) filed on \_\_\_\_\_.  
2a) This action is FINAL.                            2b) This action is non-final.  
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

4) Claim(s) 1-9 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.  
5) Claim(s) \_\_\_\_ is/are allowed.  
6) Claim(s) 1-7 is/are rejected.  
7) Claim(s) 8 and 9 is/are objected to.  
8) Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

9) The specification is objected to by the Examiner.  
10) The drawing(s) filed on 01 February 2002 is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
11) The proposed drawing correction filed on \_\_\_\_ is: a) approved b) disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.  
12) The oath or declaration is objected to by the Examiner.

### Priority under 35 U.S.C. §§ 119 and 120

13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) All b) Some \* c) None of:  
1. Certified copies of the priority documents have been received.  
2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.  
14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) The translation of the foreign language provisional application has been received.  
15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

### Attachment(s)

1) Notice of References Cited (PTO-892)  
2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_.  
4) Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.  
5) Notice of Informal Patent Application (PTO-152)  
6) Other: \_\_\_\_\_

The listing of references in the specification is not a proper information disclosure statement. 37 CFR 1.98(b) requires a list of all patents, publications, or other information submitted for consideration by the Office, and MPEP § 609 A(1) states, "the list may not be incorporated into the specification but must be submitted in a separate paper." Therefore, unless the references have been cited by the examiner on form PTO-892, they have not been considered.

The disclosure is objected to because of the following informalities: All occurrences of "alkali earth" should be "alkaline earth". Appropriate correction is required.

Claims 1, 2 and 8 are objected to because of the following informalities: All occurrences of "alkali earth" should be "alkaline earth". Appropriate correction is required.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-7 are rejected under 35 U.S.C. 102(e) as being anticipated by Gwak et al.

This reference teaches a low voltage red phosphor comprising a  $\text{MTiO}_3$  matrix and the doping agents  $\text{M}'$ ,  $\text{Zn}$  and  $\text{M}''$ , where  $\text{M}$  is  $\text{Mg}$ ,  $\text{Ba}$ ,  $\text{Sr}$  or  $\text{Ca}$ ,  $\text{M}'$  is  $\text{Al}$ ,  $\text{Ga}$ ,  $\text{In}$  or  $\text{Tl}$  and  $\text{M}''$  is  $\text{Pr}$ ,  $\text{Eu}$ ,  $\text{Tb}$ ,  $\text{Er}$ ,  $\text{Ce}$  or  $\text{Tm}$ . The amount of  $\text{Zn}$  is 0.01-15 mol%, the amount of  $\text{M}''$  is 0.05-5 mol% and the amount of  $\text{M}'$  is 0.5-80 mol%. These amounts fall within or are the claimed ranges. The reference teaches the claimed phosphor.

Claim 8 would be allowable if rewritten or amended to overcome the objection set forth in this Office action.

Claim 9 is objected to as being dependent upon an objected base claim and will be allowable once the objection in claim 8 is corrected.

The claimed process is not taught or suggested by the cited art of record. Gwak et al teaches forming the phosphor by firing a mixture of a zinc compound and  $MTiO_3:M', M''$ , where  $M, M'$  and  $M''$  has the above definitions. There is no suggestion in the art that  $MTiO_3:M', M''$  can be prepared in situ during the step of firing with the zinc compound.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Melissa Koslow whose telephone number is (703) 308-3817. The examiner can normally be reached on Monday-Friday from 8:00 AM to 3:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Bell, can be reached at (703) 308-3823.

The fax number for Amendments filed under 37 CFR 1.116 or After Final communications is (703) 872-9311. The fax number for all other official communications is (703) 872-9310.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-0661 or (703) 308-0662.

cmk  
May 28, 2003

  
C. Melissa Koslow  
Primary Examiner  
Tech. Center 1700